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ABSTRACT

The basic tenet of the Person-Environment (P*E) Congruence model posits that well-being, as one index of adjustment, is dependent on the degree of fit between the perceived environment and the preferred environment. While the literature is clear regarding the relationship of P*E Congruence and well-being, one theoretical issue that needs to be addressed is the extent to which Person and/or Environment measures alone and in concert with P*E Congruence are predictive of well-being. This study examined the relationship of two Person measures and the P*E Congruence measure with well-being. Subjects (N=88) were males between the ages of 27 and 76 who were patients in a Veterans Administration domiciliary. Subjects were interviewed and completed a variety of questionnaires. Results showed that overall well-being was significantly predicted by the interactive P*E Congruence dimensions and by the separate Person scales assessing functional status (OARS) and personality (NEO) and that of the three, the NEO was the strongest predictor of psychological well-being. The combination of the three sets of predictor variables resulted in a higher level of prediction than any of the three scales alone. The important point from these data is that there are common themes among the disparate Person and P*E Congruence variables predicting well-being, and there are concrete activities that can be used to positively impact well-being, and hence the quality of life, experienced by the patients in the domiciliary. (ABL)

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Person-Environment Congruence, Functional Status and Personality as Predictors of Well-Being

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The basic tenet of the Person-Environment (P*E) Congruence model posits that well-being, as one index of adjustment, is dependent on the degree of fit between the perceived environment and the preferred environment (Kahana, 1974). In order to be more responsive to the person my collaborators and I (Nehrke et al., 1981) empirically derived a set of commensurate items to assess the perceived and preferred environment and expanded this formulation to include a measure of the importance of each item to the individual . The resultant Environmental Perception, Preference and Importance Scale (EPPIS) has been found to be significantly predictive of well-being (Nehrke et al., 1980, 1982, 1983, 1984b, 1985, 1987; Sperbeck et al., 1981), stable across time, and internally reliable (Nehrke et al., 1986). Further, the scale is sensitive to differences in microenvironments within a single institutional setting (Nehrke et al., 1984b) and is generalizable to non-VA institutions in the community (Nehrke et al., 1987).

While the literature is clear regarding the relationship of P*E Congruence and well-being, one theoretical issue that needs yet to be addressed is the extent to which Person and/or Environment measures alone and in concert with P*E Congruence are predictive of well-being (Parr, 1980; Lawton, 1982). The focus of the present paper examines the predictive relationships of two Person measures and the P*E Congruence measure with well-being and determines which of the specific dimensions within each predictor scale are significant predictors of well-being.

Method

Participants:

A total of 88 male patients recently admitted to the VA Domiciliary participated in the study. The patients ranged in age from 27 to 76 with a

mean age of 56.2 years. On average they had more than 12 years of education with a range of from 4-8 years of school to post graduate work.

Admission to the domiciliary was based on the fact that for physical, psychiatric, social and/or financial reasons the veteran could not maintain himself in the community. However, to be admitted to the Domiciliary also requires that the individual be able to care for all of his own activities of daily living as the nursing and physician staffs are limited and not available for regular or full time supervision. Further, all participants in this study were legally competent and did not evidence acute psychotic behavior or severe brain dysfunction that would interfere with the collection of the data.

Instruments:

EPPIS: The EPPIS contains two subscales including the Environmental Scale (ES) which assesses the perceived environment and the Environmental Preference (EP) which assesses the preferences and importance of each attribute to the person. Using cluster analysis the two items that best predicted well-being were selected for use in this project so that the scale would be more attractive to clinical staff and reduce the response burden on patients. The P*E Congruence score is computed by taking the absolute difference of the ES from the EP and then multiplying the result by the Importance score for that item. Importance ranged from 1 (not important) to 3 (very important). Scores for the two items within each of the 15 dimensions of the EPPIS were summed to obtain the dimension scores.

OARS: Functional status was assessed using the OARS (Duke, 1978) scale which measures degree of impairment in each of five areas including: Social, Financial, Mental Health, Physical Health and Activities of Daily Living.

The scores, which range from 1 (no impairment) to 6 (total impairment), were assigned by the interviewer after the 45 minute interview was completed.

NEO: For a measure of personality the NEO scale (Costa & McCrae, 1985) was selected. The scale has 181 statements to be answered from Strongly Agree to Strongly Disagree, and summarizes these data in five overall scores assessing the dimensions of Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness.

Well-being: Data previously collected and reported (Nehrke et al., 1984a) indicated that when the Life Satisfaction Index A (Neugarten et al., 1961) and Philadelphia Geriatric Center Morale scale (Lawton 1972, 1975) are jointly factor analyzed the results are quite similar to previous factor analytic study findings (Lawton, 1975; Adams, 1969). A total of 23 items were retained and in only one factor was there an overlap, by one item, of the two scales. Factor I is similar to Lawton's (1975) Agitation factor while Factor III is much like his Attitude Toward Own Aging factor. Factors II, IV and VI are similar to the factors noted by Adams (1969)--Congruence Between Desired and Achieved Goals, Mood Tone and Zest for Life, respectively. Only Factor V had no prior referent and was basically concerned with the person's health. For the present study, however, only the total well-being score was computed by summing the 23 items.

Procedure:

Each participant was interviewed individually, within 3 to 4 weeks after admission to the Domiciliary, to explain the nature of the study and obtain his informed consent. The interviewer then collected the demographic and OARS data. The remaining scales were self-administering scales and participants completed them in a conference room. Total time for the testing required about four hours and participants completed the materials

in two or three sessions, depending on their own schedules and speed of completion, so as to minimize fatigue. If the veteran had difficulty reading the material, the interviewer would read the questionnaire items for the veteran. The interviewer was available for questions at all times.

Results

To answer the questions regarding the predictive value of the Person and P*E measures the analyses of choice are the full and stepwise multiple regression with total well-being as the criterion variable. The predictor variables were the 15 dimensions of the EPPIS, the 5 dimensions of the OARS and/or the 5 dimensions of the NEO.

In line with previous research findings (e.g. Nehrke et al., 1981) the 15 dimensions of the EPPIS significantly predicted well-being ($\underline{R}$ = .529). In a stepwise regression only two dimensions, Lack of Respect from Staff (EPPIS 8) and Staff Support for Personal Autonomy (EPPIS 3), entered significantly ($\underline{R}$ = .447).

For the OARS, by itself, the $\underline{R}$ = .64 and three dimensions entered the stepwise regression. The dimensions in the stepwise analysis include the Mental (OARS 3), Economic (OARS 2) and Physical (OARS 4) impairment areas ($\underline{R}$ = .59).

The analysis of the NEO dimensions resulted in $\underline{R}$ = .69 and three dimensions entered the stepwise regression ($\underline{R}$ = .681). The three dimensions in the stepwise analysis are Neuroticism (NEO 1), Extraversion (NEO 2) and Conscientiousness (NEO 5).

The full regression analysis entered the 25 predictor dimensions which resulted in an $\underline{R}$ of .815. In the stepwise analysis ($\underline{R}$=.74) six factors were found to account for significant amounts of variance and included, in order of occurrence, Neuroticism NEO 1), Extraversion (NEO 2), Lack of Respect

from Staff (EPPIS 8), Staff Support for Personal Autonomy (EPPIS 3), Aloofness of Residents (EPPIS 15), and Mental Impairment (OARS 3).

Discussion

From these data it is clear that overall well-being is significantly predicted by the interactive P^E Congruence dimensions and by the separate Person scales assessing functional status (OARS) and personality (NEO) and that of the three, the NEO was the strongest predictor of psychological well-being. It is also apparent that the combination of the three sets of predictor variables results, as expected, in a higher level of prediction than any of the three scales alone.

In terms of the stepwise regression findings there was one interesting note in that EPPIS 15, Aloofness of Residents, which was not significant in the analysis of the EPPIS only dimensions, was significant in the combination analysis while all of the other significant dimensions had previously been significant in their respective analyses. In general these data suggest that as P^E INcongruence, neuroticism, and functional impairment levels increase there is a decrease in well-being and that as extraversion increases well-being also increases. The exception is the Staff Support for Personal Autonomy dimension (EPPIS 3) wherein the coefficient is positive indicating that as incongruence increases well-being increases. One might speculate that incongruence, in this instance, is characteristic of persons who want more control of their lives than is currently available and that such persons are also more willing to be involved in activities even though they do not feel that staff encourages such behaviors.

At a more general level, these data support the previous work of the present investigators and the formulation suggested by Parr (1980) regarding

the need to look at a four factor model including P (person characteristics), E (environment characteristics), M (mediators, or, in the present situation P*E Congruence) and B (behavioral outcome). Similarly, Lawton, 1982) refers to and expands the equation of Lewin (1935) to read B = f(P,E,PxE) and refers to this as an ecological equation which will be more sensitive to the needs of the individual. In the present context, however, the authors agree with the formulation of Parr in suggesting that the PxE portion of the equation is not simply an interaction term, but a main effect in its own right as it assesses the perceived and preferred psychosocial environment and how important this is to the individual.

As part of a larger, longitudinal study, the results presented here are but the initial findings predicting well-being at the first time of testing. The more critical test of the predictive relationship of P and P*E variables will occur as sufficient longitudinal data are available to assess the effectiveness of time one data in predicting well-being at the time of the 6 and 12 month retests. However, the clinical value of the predictive relationships is, perhaps, of most importance. The overall impact of these findings is that well-being may be affected by changes in the particular dimensions that are significant predictors of well-being. Together, the NEO and OARS focus attention on the mental health of the individual and specifically indicate that programs intended to decrease neurotic behaviors and increase extravertive behavior may result in improved well-being. Such programs could take the form of involving patients in social events and teaching them ways to interact with others which would simultaneously involve the EPPIS 15 (Aloofness of Residents) predictor dimension. The remaining dimensions from the EPPIS suggest that working with the staff would be valuable. The extent to which the staff encourages autonomy and

treats patients are critical to the well-being of the veterans. The important point from these data is that there are common themes among the disparate Person and P*E Congruence variables predicting well-being, and there are concrete activities that can be used to positively impact well-being, and hence the quality-of-life, experienced by the patients in the Domiciliary.

Well-being, P*E Congruence, Functional Status, Personality, Veterans

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